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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,558	08/25/2003	Arthur G. Wilson	78302 (P1663)	3226
27975	7590	12/07/2005	EXAMINER	
ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A. 1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE P.O. BOX 3791 ORLANDO, FL 32802-3791			LUU, THANH X	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/647,558

Applicant(s)

WILSON ET AL.

Examiner

Thanh X. Luu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This Office Action is in response to amendments and remarks filed September 26, 2005. Claims 1-11 are currently pending.

#### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

#### ***Claim Objections***

2. Claim 8 is objected to because of the following informalities:

In claim 8, "the photodiode" lacks proper antecedent basis. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broutin et al. (U.S. Patent 6,839,364) in view of Suni et al. (U.S. Patent 6,233,045).

Regarding claim 1, Broutin et al. disclose (see Fig. 1) a method and transmitter for providing a wavelength stabilized output signal having a wavelength, comprising: a package (inherent in system 10) for housing electronic and optical components; a light source (12) disposed within the package for providing the output signal; a photodetector (34) disposed within the package in close proximity to the light source, wherein at least

a portion of the output is optically coupled to the photodetector; the photodetector being reversed biased (inherent in photodetection) and providing an indication of output power, a temperature sensor (20) for providing a temperature signal as claimed; a feedback circuit (14, 38) utilizing the indication of the output power from the photodetector to send a feedback signal to adjust the output power of the light source; and a look-up table (50) comprising a plurality of stored values corresponding to control voltages for adjusting the feedback signal and maintaining the wavelength of the light source when the power of the light source changes and/or when the temperature about the light source changes. Broutin et al. do not specifically disclose a switching means for reverse and forwarding biasing the photodetector for it to function as both a photodetector and a temperature sensor. Suni et al. teach (see col. 17, lines 11-21) using a photodetector in reverse bias to detect light and using the same photodetector in forward bias to detect temperature. A switch means that applies a reverse and forward bias is inherent. Suni et al. further recognize that such a configuration allows for both light and temperature to be detected by the same device, hence, providing a more cost effective device. Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide a switch means for switching between a reverse and forward bias in the apparatus of Broutin et al. in view of Suni et al. to eliminate the need for a separate temperature sensor and obtain a more cost effective device.

Regarding claims 2-8, 10 and 11, Broutin et al. in view of Suni et al. further disclose (see Fig. 1) a TEC (22), a memory array (50) as claimed. Broutin and Suni et

al. do not specifically disclose how the test values are generated in the memory.

However, the manner in which calibration (the lookup table values are generated) is carried out is notoriously well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use such method steps in the apparatus of Broutin et al. in view of Suni et al. to obtain correct values for a desired output.

Regarding claim 9, Broutin et al. in view of Suni et al. the claimed invention as set forth above. Broutin and Suni et al. do not specifically disclose a hermetically sealed package. However, hermetically sealed packages having such elements are notoriously well known. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to hermetically seal the package in the apparatus of Broutin et al. in view of Suni et al. to protect such elements from contamination and improve the operation of the device.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh X. Luu whose telephone number is 571-272-2441. The examiner can normally be reached on M-F 6:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for

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the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thanh X Luu  
Primary Examiner  
Art Unit 2878

12/2005